

AMENDMENTS TO THE CLAIMS

**Claim 1 (currently amended):** A print head in a printing system, the printing system being configured to move the print head in a first print direction and a second print direction across a substrate without changing a rotational orientation of the print head relative to the substrate, the first print direction and the second print direction being nonparallel, the print head comprising:

an ejector base having opposing first and second edges aligned parallel to the first print direction and opposing third and fourth edges aligned parallel to the second printing direction; and

a first plurality of ejectors mounted in the ejector base, the first plurality of ejectors being arranged in a first line, the first line being diagonal to the first print direction and the second print direction.

**Claim 2 (previously presented):** The print head of Claim 1, wherein the first print direction and the second print direction are orthogonal.

**Claim 3 (previously presented):** The print head of Claim 2, wherein the first line is at a 45° angle with respect to the first print direction and the second print direction.

**Claim 4 (previously presented):** The print head of Claim 1, wherein the print head is configured to print an IC pattern, wherein a first spacing between each of the first plurality of ejectors in the first print direction is an integer multiple of a first design rule of the IC pattern, and wherein a second spacing between each of the first plurality of ejectors in the

second print direction is an integer multiple of a second design rule of the IC pattern.

**Claim 5 (original):** The print head of Claim 4, wherein the first design rule is the same as the second design rule.

**Claim 6 (previously presented):** The print head of Claim 1, further comprising a second plurality of ejectors mounted in the ejector base, the second plurality of ejectors being arranged in a second line, the second line being parallel to the first line, wherein each of the first plurality of ejectors and the second plurality of ejectors has a unique position in the first print direction.

**Claim 7 (previously presented):** The print head of Claim 6, further comprising a third plurality of ejectors mounted in the ejector base, the third plurality of ejectors being arranged in a third line, the third line being parallel to the first line, wherein each of the first plurality of ejectors and the third plurality of ejectors has a unique position in the second print direction.

**Claim 8 (original):** The print head of Claim 1, wherein the plurality of ejectors are configured to print a phase change material for a semiconductor process mask.

**Claim 9 (original):** The print head of Claim 1, wherein the plurality of ejectors are configured to print a solution-processable electronic materials to form an integrated circuit.

--Claim 10 (new): A printing system comprising:

a stage for supporting a substrate;

a print head including:

an ejector base, and

a plurality of ejectors mounted in the  
ejector base;

means for moving the print head in a first print  
direction and a second print direction across a  
substrate without changing a rotational orientation of  
the print head relative to the substrate, the first  
print direction and the second print direction being  
nonparallel; and

means for causing the plurality ejectors to  
selectively eject material toward the substrate when  
the print head is moving in either of the first  
printing direction and the second printing direction,

wherein the first plurality of ejectors are arranged on the  
ejector base in a first line, the first line being diagonal to  
the first print direction and the second print direction.

Claim 11 (new): The printing system of Claim 10, wherein the  
first print direction and the second print direction are  
orthogonal.

Claim 12 (new): The printing system of Claim 11, wherein the  
first line is at a 45° angle with respect to the first print  
direction and the second print direction.

Claim 13 (new): The printing system of Claim 10, further  
comprising means for causing the print head to print an IC  
pattern on the substrate, wherein a first spacing between each  
of the first plurality of ejectors in the first print direction

is an integer multiple of a first design rule of the IC pattern, and wherein a second spacing between each of the first plurality of ejectors in the second print direction is an integer multiple of a second design rule of the IC pattern.

**Claim 14 (new):** The printing system of Claim 13, wherein the first design rule is the same as the second design rule.

**Claim 15 (new):** The printing system of Claim 10, further comprising a second plurality of ejectors mounted in the ejector base, the second plurality of ejectors being arranged in a second line, the second line being parallel to the first line, wherein each of the first plurality of ejectors and the second plurality of ejectors has a unique position in the first print direction.

**Claim 16 (new):** The printing system of Claim 15, further comprising a third plurality of ejectors mounted in the ejector base, the third plurality of ejectors being arranged in a third line, the third line being parallel to the first line, wherein each of the first plurality of ejectors and the third plurality of ejectors has a unique position in the second print direction.

**Claim 17 (new):** The printing system of Claim 10, further comprising means for causing the plurality of ejectors to print a phase change material for a semiconductor process mask.

**Claim 18 (new):** The printing system of Claim 10, further comprising means for causing the plurality of ejectors to print a solution-processable electronic materials to form an integrated circuit.

**Claim 19 (new):** The printing system of Claim 10, further comprising means for aligning the plurality of ejectors to the substrate before causing the plurality of ejectors to selectively eject said material toward the substrate.

**Claim 20 (new):** The printing system of Claim 19, wherein said means for aligning comprises a camera mounted on said means for moving.--